

**ABSTRACT**

Disclosed is a method and system for dynamically selecting a communication channel between an access point (AP) and a plurality of stations (STAs) in an IEEE 802.11 wireless local area network (WLAN). The method includes the steps of: determining whether a new channel between the AP and STAs within a particular basic service set (BSS) is needed; requesting a channel signal quality measure to some of the plurality of stations by the AP; reporting a channel signal quality report back to the AP based on a received signal strength indication (RSSI) and a packet error rate (PER) of all channels detected by the stations within the BSS; selecting a new channel based on the channel quality report for use in communication between the AP and the plurality of stations.